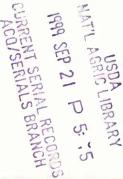


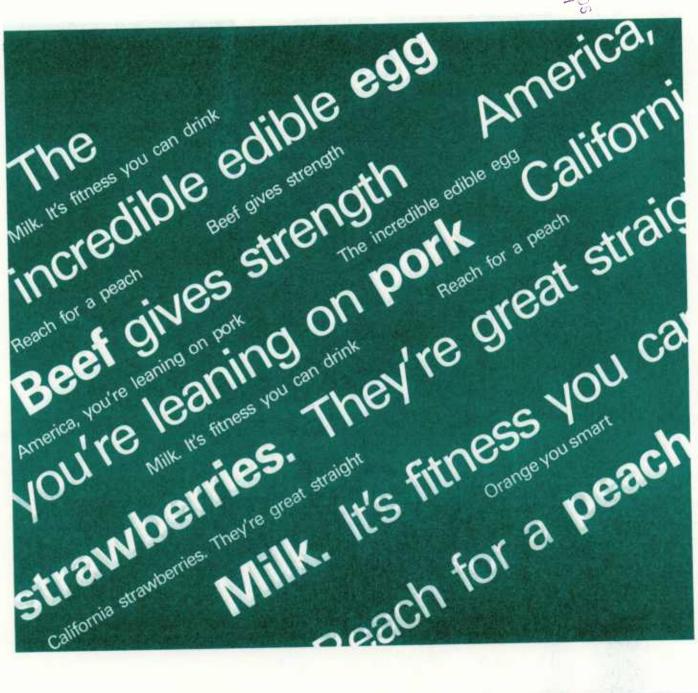
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Generic Advertising of Farm Products

Rosanna Mentzer Morrison





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Abstract

In 1982, American producers spent about \$44 million on domestic generic promotion under Federal programs. Producers also spent about \$22 million promoting U.S. farm products overseas. The U.S. Department of Agriculture (USDA) contributed an additional \$19 million for promoting U.S. products abroad. Commodity groups spent \$91 million generically promoting their products under State-legislated programs in 1979. Generic advertising promotes a type of food, such as milk, orange juice, or eggs, rather than a specific company's product. About 85 percent of all generic advertising and promotion is financed through producer agreements under various Federal and State programs. The effectiveness of generic advertising may depend on such factors as timing, the supply of the product, and prices of substitute products. Questions remain about the effectiveness of generic advertising programs and the costs and benefits to consumers.

Keywords: Generic advertising, promotion, agricultural commodities.

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Note

Use of company product trade names in this publication is for description only and does not imply endorsement by the U.S. Department of Agriculture.

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Summary

In 1982, American producers spent about \$44 million on domestic generic promotion under Federal programs. Producers also spent about \$22 million promoting U.S. farm products overseas. The U.S. Department of Agriculture (USDA) contributed an additional \$19 million for promoting U.S. products abroad. Commodity groups spent \$91 million generically promoting their products under State-legislated programs in 1979. Generic messages such as "The incredible edible egg" and "A day without orange juice is like a day without sunshine" promote a type of food rather than a particular company's product.

Although generic advertising of farm products is small compared with branded food and beverage advertising, the effectiveness of generic advertising and its effects on consumers are important issues, especially given recent legislation that will generate over \$130 million of additional funds for dairy promotion and research. Economic studies of the effectiveness of generic advertising programs have generally been confined to a few commodities. This report describes the various Federal and State programs under which generic promotions occur, and discusses some economic and policy issues facing generic advertisers.

Generic advertising is used to expand the total demand for a product in several ways. It can be used to counter competition from other products, such as milk versus soft drinks. It is also used to increase public awareness of lesser known foods, alter negative attitudes about certain foods, and introduce new product uses. In 1982, commodity groups spent 81 percent of their media advertising dollars for network and local television and network radio advertisements, 17 percent on space in consumer magazines and Sunday newspaper supplements, and 2 percent on outdoor billboards.

The effectiveness of generic advertising may depend on such factors as timing, the supply of the product, and prices of substitute products. A 1974 study conducted by the Florida Department of Citrus and the University of Florida concluded that advertising was effective in increasing sales of canned, single-strength grapefruit juice, but the effectiveness per dollar spent decreased as total expenditures increased.

Because a generic message benefits all producers in the industry, U.S. producers of many basic agricultural commodities collectively sponsor advertising for their products. About 85 percent of all generic advertising and promotion is financed through producer agreements under various Federal and State programs. Voluntary producer associations sponsor the remaining generic promotions. Producers of milk and other dairy products, fruits, and fruit juices spend the most money generically promoting their products to U.S. consumers. In the overseas market, wheat, oilseeds and products, cotton, and feed grains account for over half of the generic promotion of U.S. agricultural products.

Because the Federal Government and many State governments monitor programs which fund generic promotion efforts, researchers need to examine the effectiveness of such programs and the costs and benefits to consumers. Questions remain about whether generic advertising raises consumer prices, provides useful information that exceeds the increased costs, weakens brand loyalty, and encourages the use of new or lesser known brands.

Generic Advertising of Farm Products

Rosanna Mentzer Morrison

Introduction

Advertising strives to expand the sales of a product either by increasing the quantity consumers purchase or by getting consumers to pay a higher price for the product. Successful brand advertising, which seeks to boost the sales of a particular company's or producer's brand of product, partially depends on whether the brand can be differentiated in consumers' minds from competitors' brands. A generic message such as "Milk. It's fitness you can drink." on the other hand, promotes purchases of products without reference to the specific farmer or manufacturer.1 Generic messages are used to promote products that are essentially homogeneous. Because producers of a basic agricultural commodity cannot easily convince consumers to choose one egg or orange over another, they use generic advertising to expand total demand for the commodity and hope to increase their own sales as well.

This report serves as a starting point for research into the effects of generic advertising of farm commodities, by describing the Federal and State programs under which funds are collected from producers for generic promotion and research and the monies spent on these efforts. It also outlines several of the economic and policy issues of generic advertising, including complications involved in determining its effectiveness, the optimal generic advertising budget, the benefits and costs to consumers, and other unresolved issues.

Uses of Generic Advertising and The Free-Rider Problem

Generic advertising has many purposes. It can help retain product loyalty and counter competition from another food product. One purpose of generic milk advertising is to counter soft drink advertising. Pro-

¹Although products sold by cooperatives, such as Sunkist oranges and Land O' Lakes butter, conform to this definition, these products are linked with a particular business entity. For this reason, advertising by individual cooperatives is not classified as generic advertising in this paper.

ducer groups also use generic advertising to increase public awareness of lesser known foods, such as kiwifruit and papayas, or to introduce new uses for traditional foods, like the Florida Citrus Commission's slogan, "Orange juice—it's not just for breakfast anymore." Generic advertising can also be used to alter negative public opinions about a food. The emphasis of the National Potato Promotion Board's advertising campaign is on the nutritional value and relatively low-calorie content of potatoes.

Generic advertising can be targeted to retailers, restaurateurs, institutional foodservice operators, or final consumers. Producer groups promote expanded use of their products in the foodservice industry by providing menu and recipe ideas. The Pork Industry Group of the National Live Stock and Meat Board is trying to persuade the fast-food industry to add pork to its hamburger and chicken fare.

Overseas market development is another application of generic advertising. Dozens of U.S. commodity groups are engaged in promotion efforts in various countries to maintain current overseas markets for U.S. farm products and to break into new markets.

Because a generic message promotes a type of food, such as milk or apples, all producers in the industry benefit from the generic campaign. This situation creates a "free-rider" problem of producers gaining benefits from the generic promotion without contributing funds. The free-rider potential inhibits individual producers and marketing firms from conducting generic campaigns and encourages them to join together for advertising efforts. Producers can do this on a voluntary basis, but this arrangement does not solve the free-rider problem because all producers are not required to contribute promotion funds.

Producer groups generally prefer an arrangement that provides more inclusive and mandatory participation. Federal or State-legislated programs for generic promotion more effectively guarantee producer cooperation and eliminate free riders. Such programs provide the legal authority to assess all producers of a specific commodity for generic promotion and research funds. Contributions are usually collected via a check-off program, where a small portion of the first handler's payment to the producer, based on quantity sold, is withheld.

Commodity groups also use a small part of their generic funds for production and marketing research. Research areas include ways to improve growing efficiency and combat plant and animal diseases, surveys of consumers' uses of the product, ways to increase marketing efficiency, and new uses for the product.

Expenditures for Generic Promotion and Research

Funds for generic promotion and research are collected under three major arrangements: voluntary associations, Federal programs, and State-legislated programs. Recent data on expenditures by voluntary associations have not been compiled, but these groups are thought to finance less than 15 percent of generic advertising and research.²

In 1982, American producers spent about \$44 million on domestic generic promotion and almost \$9 million on research under Federal programs. Producers also spent about \$22 million promoting U.S. agricultural products overseas. The USDA contributed an additional \$19 million for overseas generic promotion. Commodity groups spent \$91 million generically promoting their products and \$10 million funding research under State-legislated programs in 1979. Although expenditures under State programs for 1982 are still being compiled, they are expected to have increased since 1979 because more commodity groups have obtained State support and other groups have collected more money.

Many commodity groups spend a large portion of the above promotion funds on consumer-targeted advertising in a variety of media in the hopes of increasing demand for their commodities.³ Pooling funds from many producers allows commodity groups to buy costly television time. Television is the preferred advertising medium for low-priced, frequently purchased convenience goods, like food, because of television's wide audience and potential for a memorable combination of visual and auditory messages. Economists have conducted studies linking television advertising with profitability for manufacturers of convenience goods (12).

In 1982, U.S. food and fiber commodity groups spent about \$84 million on generic messages in consumer-targeted media (table 1). Eighty-one percent of this money was spent for network and local television and network radio advertisements, 17 percent was spent on space in consumer magazines and Sunday newspaper supplements, and the remaining 2 percent was for outdoor billboards. Producers of milk and dairy products were the big advertisers with 34 percent of the generic advertising, followed by producers of citrus fruits and juices with 21 percent, and other fruits (mainly California fruits and Washington apples) with 18 percent.

Generic advertising in consumer-targeted media is small compared with brand advertising. Generic advertising accounted for only 2.1 percent of the \$3.6 billion spent advertising foods and beverages (including alcoholic beverages) in consumer-targeted media in 1982, down from 2.3 percent in 1972. This decline probably reflects increased brand advertising rather than reduced interest in generic advertising. The number of commodity associations sponsoring generic advertising has increased from 35 groups in 1972 to 43 in 1982. Consumer-targeted advertising by the American Wool Council and Cotton, Inc. represents about 15 percent of the \$26.6 million spent by the entire clothing fabric and finishes industry.

Advertising in consumer-targeted media like television and nontrade magazines is only part of the generic promotion effort. Commodity groups also spend substantial sums of money on other types of selling efforts, such as offering incentives to retailers that advertise the product, placing advertisements in trade magazines, engaging in coupon activities, and sponsoring trade shows and contests. For example, the California Avocado Commission spent only \$1.4 million of its \$3.9-million promotion budget in 1982 on consumer-targeted media (4).

²Source: Discussion with political scientist Garry Frank in May 1983. His Ph.D. dissertation dealt with Federal and State commodity check-off programs.

³Advertising refers to the use of various media to deliver information, usually to the final consumer. Promotion is the broader category of selling efforts that includes issuing coupons, sponsoring contests, offering price discounts to retailers, and other activities that encourage product sales.

⁴Italicized numbers in parentheses refer to references at the end of this report.

Table 1—Generic advertising by U.S. agricultural commodity associations¹ in U.S. media²

Commodity	1972	1981	1982		
	1,	1,000 dollars			
Milk and other dairy products Citrus fruits and juices Other fruits Liquor ³ Red meats	11,882.9 6,682.5 2,184.4 2,987.1 488.3	7,759.3	6,869.6		
Vegetables Eggs Rice Nuts Poultry	109.8 32.0 180.8 0 34.1	2,697.0	,		
Seafood Cereal Sugar Beer Total food and beverages	49.3 37.2 1,136.2 1,415.4 27,220.0	169.4 0 0 0 69,968.1	.6 0 0 0 80,088.2		
Cotton Wool	1,054.7 169.6	4,505.2 524.7	3,428.7 660.0		
Total	28,444.3	74,998.0	84,177.0		

'The number of associations sponsoring generic advertising was 43 in 1982, 42 in 1981, and 35 in 1972. Number of associations should not be interpreted as the number of commodities being advertised because several associations promote more than one commodity. For example, the American Sheep Producers Council promotes both lamb and wool.

²Media include network and spot (local) television, network radio, major consumer magazines, nationally distributed Sunday newspaper supplements, and billboards.

³Includes expenditures for Puerto Rican rums. Source: Leading National Advertisers, Inc.

Federal Programs

Many voluntary associations for widely produced commodities have moved toward federally authorized programs to extend the geographic range of participants to a national level and to eliminate the free-rider problem. There are three types of Federal involvement in generic advertising of agricultural products: legislated research and promotion acts, research and advertising activities under marketing orders, and joint promotion ventures with commodity groups or private firms to develop international markets.

Research and Promotion Acts

Obtaining Federal authority to assess producers of a specific commodity for generic advertising and research is a two-step process.⁵ First, Congress must pass and the President must sign legislation granting the authority. Then, a required percentage of all eligible producers who choose to vote must vote in favor of a program that incorporates the basic features of the act. Producers of eggs, potatoes, wheat food products, cotton, lamb, wool, mohair, beef, and floral products have secured legislative permission to collectively conduct research and sponsor advertising campaigns for their products. Beef producers, however, have twice voted against instituting a check-off program, and the establishment of a "Floraboard" to promote floral products was turned down by 67 percent of those voting during the 1983 referendum.

The oldest of the research and promotion acts is the National Wool Act of 1954 which authorizes promotion and market development of wool, mohair, lamb, and goats. The National Wool Act is unique in several respects. Generic activities under the act are financed through deductions from price-support payments to wool and mohair producers. When wool and mohair prices exceed the support level, producers do not receive payments and no money is collected for promotion and market development. The National Wool Act is also unique because its authorization is included in the farm bill that is reconsidered by Congress every 4 or 5 years. After each authorization is received. USDA conducts a referendum among producers. The most recent referendum, in late 1982, passed by a strong margin. The deduction rate for wool has risen over the years from 1 cent per pound of shorn wool marketed to its current level of 4 cents.6 The mohair deduction rate is also 3 cents higher than its original 1.5 cents per pound of mohair marketed.

Unlike the other research and promotion acts, the National Wool Act has no refund provisions. Other acts contain refund provisions which allow producers freedom not to participate. Producers can have their contributions returned by submitting a written request and proof that they paid the assessment. Producers must do this within 90 days after

⁶The national average price received by wool producers, plus price support payment, was \$1.37 per pound in 1982.

⁵Under the Potato Research and Promotion Act, potato handlers are responsible for payment of the assessment. The act states that the handler may collect the assessment from the producer or deduct it from the producer's proceeds. The general practice is for the handler to deduct the assessment from the producer's proceeds. The other acts, except for the National Wool Act, stipulate that producers pay their handlers the assessment.

the assessment was paid, providing they paid on time. Individual refund requests are kept confidential.

Refund provisions, however, lessen the money available for advertising and research. Furthermore, they introduce the free-rider problem of nonparticipants benefiting from other producers' promotional expenditures. Refund rates for eggs and cotton have risen in recent years and stood at 30 and 32 percent, respectively, at the end of 1982 (table 2). Program administrators in USDA's Agricultural Marketing Service (AMS) believe refund rates are up because of poor economic conditions and producers' need for the funds. Cotton refund rates jumped from 8 percent to 24 percent in 1977 when an amendment providing for a supplemental assessment went into effect. This supplemental assessment doubled the assessment rate for cotton. Commodity program leaders are concerned about rising refund rates and have launched efforts to remind producers of the programs' benefits.

Under the acts for eggs and potatoes, funds are collected from all producers, except for the very smallest, based on quantity sold. For example,

under the Egg Research and Consumer Information Act of 1974, egg producers contribute 5 cents per 30-dozen case sold. Producers who have fewer than 3,000 laying hens or who use their eggs for hatching purposes are exempt. Farmers contribute 1 cent per hundredweight of potatoes sold for human food and seed. For cotton, all producers, regardless of size, are assessed \$1 per bale plus 0.4 percent of the selling price of a bale of cotton. Research and nutrition education for wheat and wheat foods is funded by a 1 cent per hundredweight assessment on wholesale bakers and other end product manufacturers based on the amount of processed wheat (basically flour) they buy. Unlike the other acts. the Wheat and Wheat Foods Research and Nutrition Education Act of 1977 does not allow advertising and promotion other than nutrition education.

30-dozen case of eggs hundredweight of potatoes \$ 18.30 \$ 5.70

bale of cotton

\$319.70 (plus \$58.00 in deficien-

cy payments)

The average price of flour to bakers of white pan bread was \$11.11 per hundredweight.

Table 2—Assessment and refund rates under the Federal research and promotion acts

Legislation	-		Refund rate					
Legislation	1973-741	1977-78	1981-82	1982-83	1973-74	1977-78	1981-82	1982-83
		Dollars/vo	olume			Per	cent	
National Wool Act of 1954 ²	0.015/lb. (.015/lb.		0.0 -0.120			No refunds	s permitted	
Cotton Research and Promotion Act of 1966	1.0/bale	1.0/bale	3 1.0/bale	3 1.0/b	ale³ 1	12 20	33	32
Potato Research and Promotion Act of 1971	.01/cwt.	.01/cwt.	.01/cwt	.01/c	wt.4 1	12 13	10	9
Egg Research and Gonsumer Information Act of 1974	NA	.05/30-doz case	z05/30-do: case	z05/30 cas		JA 11	28	30
Wheat and Wheat Foods Research and Nutrition Education Act of 1977	NA	NA	.01/cwt.	.01/c	wt. N	IA NA	35	34

NA = program was not in effect.

⁷The following approximate national average prices received by producers in 1983 are provided for comparison with assessment rates:

¹Fiscal years (July 1-June 30) or crop years. Egg rates are for calendar years.

²Rates in parentheses are mohair deductions.

³One dollar per bale plus 0.4 percent of the selling price of a bale of cotton. This provision has raised the assessment rate to between \$2.10-\$2.50 per bale since 1976.

In December 1982, the Potato Board tried to switch the assessment rate to a flexible basis of 0.5 percent of the average price of potatoes over the previous 10 years. The idea was turned down in a producer referendum.

In the fall of 1982, egg producers voted against raising the assessment rate to 7.5 cents per 30-dozen case.

Source: Agricultural Marketing Service, USDA.

Industry boards such as the American Egg Board collect producers' contributions, administer the research and promotion programs, and provide refunds to producers who do not want to participate. Board members are appointed by the Secretary of Agriculture from nominations submitted by industry organizations. Two recent research and promotion acts require that consumers be represented on the boards administering beef and wheat programs. AMS supervises the activities of the boards to ensure that they comply with the intent of the acts. Except for programs under the National Wool Act, AMS is now reimbursed by the various boards for these oversight responsibilities. AMS reviews the boards' budgets to see that funds are legally spent in accord with the acts. In addition to generic advertising. funds are also spent on production and marketing research and nutrition education.

In 1982, \$22.9 million were spent on promotion and \$7.15 million on research under these acts (table 3). More money was budgeted for generic promotion in 1983 and less for research. Overall, total research and promotion expeditures were about \$2.5 million less in 1983 than in 1982. Most of the decline occurred in research and promotion for cotton. The cotton yield was low in 1982, and the refund level was fairly high.

Marketing Orders

Generic advertising of farm commodities also occurs under some of the Federal marketing orders for fruits and vegetables, and milk. Advertising and promotion are secondary activities of marketing orders which primarily provide a mechanism for establishing orderly marketing conditions and improving farm prices. In 1982, marketing orders provided \$21.2 million for advertising and promotion and \$1.6 million for research (table 4). Marketing orders generally cover a particular region's production of a commodity, such as California plums, as opposed to the Federal research and promotion acts which represent the total domestic production of a commodity.

The Agricultural Marketing Agreement Act of 1937 is the statutory basis for the 47 Federal marketing orders for fruits, vegetables, and specialty crops like nuts, hops, and spearmint oil. Amendments to this act allow 38 of the marketing orders to "establish or provide for the establishment of marketing research and development projects designed to assist, improve, or promote the marketing, distribution, and consumption" of a particular commodity (16). Sixteen of the 38 orders allow paid advertising to supplement the market research and other promotional activities (table 5). Eighteen marketing

Table 3—Research and promotion expenditures under Federal research and promotion acts

I	Research				Promotion			
Legislation	1974	1978	1982	1983¹	1974	1978	1982	1983¹
				1,000	0 dollars			
National Wool Act of 1954 ²	0	0	0	0	600	1,800	3,400	3,200
Cotton Research and Promotion Act of 1966	4,000	5,100	6,500	4,300	9,400	15,400	15,000	13,700
Potato Research and Promotion Act of 1971	0	0	0	0	1,600	2,400	1,500	1,700
Egg Research and Consumer Information Act of 1974	0	600	600	70	0	4,200	2,900	4,200
Wheat and Wheat Foods Research and Nutrition Education Act of 1977	0	0	50	0	0	0	120³	360³
Total	4,000	5,700	7,150	4,370	11,600	23,800	22,920	23,160

¹Budgeted.

²The National Wool Act of 1954 does not permit research.

The Wheat and Wheat Foods Research and Nutrition Education Act of 1977 only allows research and nutrition education. Promotion expenditures are for nutrition education.

Source: Agricultural Marketing Service, USDA.

orders include production research as a possible use of funds. The marketing orders for California olives, Idaho-Oregon onions, Texas tomatoes, and Florida celery permit the administrative committee to accept additional voluntary contributions for research and promotion. The California almond, olive, and raisin marketing orders allow producers who engage in brand advertising to credit those expenditures toward their contributions to the generic campaigns.

These advertising and research activities are financed by assessments collected from the first handlers regulated under the order, based on the quantity marketed. Handlers generally deduct this small fee from prices paid to producers or include it as part of the packing charge. For example, handlers in the Texas onion order paid 4 cents per hundredweight of onions in 1979-80.8 Raising the assessment rate requires the Secretary of Agriculture's approval. There are no provisions for refunds under the fruit and vegetable marketing orders. The administrative committee, composed of growers and handlers appointed by the Secretary, decides what forms of promotion and research will be funded, subject to the Secretary's approval.

The popularity of generic promotion, especially paid advertising, has grown in the last decade. Twentytwo of the 38 marketing orders have added provi-

Table 4—Research and promotion expenditures under Federal marketing orders

Madatina andan		Rese	arch		Promotion			
Marketing order	1974	1978	1982	1983¹	1974	1978	1982	19831
				1,000 (lollars			
California grapefruit	0	0	0	0	0	0	198	126
Texas oranges and grapefruit	0	0	0	15	440	518	731	950
Florida limes	1	9	0	15	0	124	272	159
Florida avocadoes	1	0	13	17	0	25	218	145
California nectarines	3	12	26	31	138	532	1,223	1,160
California peaches	1	12	17	28	0	421	801	920
California pears	1	0	1	0	0	490	556	640
California plums	2	10	18	24	154	530	2,401	742
Washington cherries	0	0	0	2	0	5	5	14
Washington-Oregon prunes	0	2	2	2	0	0	0	0
California Tokay grapes	0	0	0	0	38	68	136	135
Oregon-Washington-California pears	0	0	0	75	0	0	0	0
Hawaii papayas	36	13	39	30	152	274	254	300
California olives	33	27	35	50	63 <i>7</i>	450	900	1,550
Idaho-Oregon onions	0	13	27	54	137	160	348	292
Texas onions	0	67	93	90	0	0	0	25
Florida celery	0	0	0	0	30	30	45	56
Texas melons	0	0	18	41	0	0	0	0
California almonds	101	197	295	344	98	212	345	265
California walnuts	0	95	351	231	0	0	0	0
California dates	Ö	0	0	0.	2	0	2	
Hops	ŏ	15	17	29	ō	Ō	0	0
Total fruits and vegetables	179	472	952	1,076	1,826	3,839	8,433	7,479
Milk	600	600	600	600	7,300	8,200	12,800	13,000
Total	779	1,072	1,552	1,676	9,126	12,039	21,233	20,479

^{&#}x27;Budgeted figures for first 14 marketing orders.

⁸For a listing of the assessment rates in 1979-80 for each fruit and vegetable order see tables 15-18 in (15).

Less than \$400.

Source: Agricultural Marketing Service, USDA.

Table 5-Selected provisions of Federal fruit and vegetable marketing orders

7 CFR¹	Commodity	Market research and development	Production research	Paid advertising	Additional voluntary funds	Year amendment added
904 905	California grapefruit Florida citrus fruit	X	X	X		1980
906 907	Texas oranges and grapefruit Arizona and California navel	X		X		1966
908	oranges Arizona and California	X				1962
	Valencia oranges	X				1962
910 911 912 913	California and Arizona lemons Florida limes Florida grapefruit (Indian River District) Florida grapefruit	X X	X	X		1962 1975
915	Florida avocados	X	X	X		1975
916 917	California nectarines California pears, plums, and	X	X	X		1971
918	peaches Georgia peaches	X	X	X		1976
919 921	Colorado peaches Washington peaches	X X				1956 1960
922 923 924	Washington apricots Washington cherries Washington and Oregon	X X				1957 1957
	prunes	X	X			1974
925 926	California grapes California Tokay grapes	X X	X	X		1980 1967
927	Oregon-Washington-California pears	X	X			1974
928 929 930 931	Hawaii papayas Cranberries Cherries Oregon-Washington Bartlett	X X	X	X		1971 1962
001	pears	X				1965
932 945 946	California olives Idaho potatoes Washington potatoes	X	X	X	X	1971, 1982
947 948	California-Oregon potatoes Colorado potatoes	X X				1955 1960
950 953	Maine potatoes Southeast U.S. potatoes					
958	Idaho-Oregon onions	X	X	X	X	1976
959 965	Texas onions Texas tomatoes	X X	X X	X	X	1973 1980
966 967 971	Florida tomatoes Florida celery Texas lettuce	X X X	X	X	X	1955 1968,1977 1960, 1980
979	Texas melons	X	X			1979
981 982 984 985	California almonds Oregon-Washington filberts California walnuts Spearmint oil	X X X X	X X X	X X		1972 1983 1974 1980
987 989 991 993	California dates California raisins Hops California dried prunes	X X X X		X X		1967, 1971, 1978 1960, 1983 1966 1961

¹7 CFR refers to title 7 of the Code of Federal Regulations. The numbers in this column are the parts that refer to each marketing order. Source: Title 7, Code of Federal Regulations, parts 900 to 999, revised as of January 1, 1983.

sions for various types of generic promotion activities since 1970. One recent order that added these provisions, the California raisin marketing order, also allows paid advertising to supplement market research and development.

The 21 fruit and vegetable marketing orders that had active research or promotion programs in 1982 spent \$8.4 million on generic promotion and \$952,000 on research that year. In 1983, these groups budgeted \$7.5 million for generic promotion and \$1 million for research.

A Closer Look at Milk Orders. A 1971 amendment to the Agricultural Marketing Agreement Act of 1937 authorizes "the establishment of research and development projects, and advertising (excluding brand advertising), sales promotion, educational, and other programs, designed to improve or promote the domestic marketing and consumption of milk and its products..."(17). These activities are financed by milk producers through assessments on milk delivered to the market each month. Because assessment rates under this legislation are now tied to the blend price of milk, they have risen from the original 5 cents per hundredweight to between 10 and 14 cents. In 1982, 6 of the 46 Federal milk marketing orders contained promotion and research provisions. Milk producers in these six orders spent \$12.8 million on advertising, promotion, and nutritional education and \$600,000 on research (table 4). An agency consisting of representatives of producers and producers' cooperative associations develops the research and promotion programs. All such programs must be reviewed and approved by USDA.

Participation in these federally authorized programs is voluntary. Any producer may receive a refund by submitting a written request to the milk marketing order administrator. In 1982, 27.5 percent of the money collected for generic milk promotion was refunded. Producers subject to State-legislated programs for generic milk advertising can also request that their contributions be refunded.

Since the first order began collecting funds for generic programs in April 1972, until December 1979, promotion programs were adopted under 25 Federal milk marketing orders at various times. During these years some programs were terminated, and others were merged as orders were merged. As recently as 1979, 16 orders had generic promotion provisions. In 1980, producers in 10 Southwest orders chose not to participate in the federally

sanctioned generic advertising and research programs, partially because of the refund provision. Instead, these producers now make nonrefundable contributions through their cooperatives.

In November 1983, legislation was passed that will greatly expand the funds available for dairy promotion. The Dairy and Tobacco Adjustment Act of 1983 mandates a nonrefundable assessment of 15 cents per hundredweight on all milk marketed by producers in the 48 contiguous States for dairy product promotion, research, and nutrition education. Producers will be given a 10-cent credit for contributions to qualified State or regional generic promotion programs already in effect. AMS analysts estimate that this nonrefundable assessment will generate about \$130 million of additional promotion and research funds. Decisions on how these funds are to be spent, including whether to use the funds for brand advertising and promotion, will be made by a National Promotion and Research Board composed of 36 dairy producers appointed by the Secretary of Agriculture. The new mandatory assessment begins with milk marketed in May 1984. In late summer of 1985, AMS will conduct a producer referendum to see if producers want to continue the program. The act also requires several yearly reports to Congress, including an independent analysis of the effectiveness of the promotional efforts.

International Programs

The third way that the Government is involved in generic advertising is through the export market development activities of USDA's Foreign Agricultural Service (FAS). Developing markets for U.S. agricultural exports requires a coordinated long-term development plan, which private firms may be unable or reluctant to support alone. Through its Market Development Cooperator Program, FAS and U.S. cooperators (agricultural trade associations and producer groups) jointly plan, implement, and finance overseas development activities, including generic advertising.

FAS works with approximately 50 agricultural trade associations, and these cooperators, in turn, usually work with 1,500 U.S. cooperatives, 8,700 private U.S. firms, and 1,700 overseas organizations (20, p. 106). For example, U.S. Wheat Associates, Inc., a foreign-market development organization representing U.S. wheat producers, provides market analysis and information for wheat buyers in foreign countries and technical assistance to foreign

millers and bakers. U.S. Wheat Associates, Inc., in conjunction with local governments and business-people, sponsors baking schools in many Asian and Latin American countries. These schools help expand the demand for U.S. wheat by improving the quality of foreign foods baked with U.S. wheat.

FAS and the U.S. cooperators each contribute about one-third of the funding. The remaining funds are provided by governments, private firms, or trade associations in the importing countries. In 1982, FAS spent \$19.1 million on these efforts (table 6). Half of this funding was for cotton, oilseeds and products, and wheat. FAS also spent \$2.4 million on international trade shows and other activities promoting sales of U.S. branded agricultural products, and a small amount on market research.

State Programs

State-legislated programs are also an important source of generic advertising, especially for farm products not covered by Federal programs. Several State promotion programs stem from marketing acts with supply management provisions, modeled after the Federal Agricultural Marketing Agreement Act of 1937. Some States establish boards or commissions, like the California Iceberg Lettuce Commission, that focus solely on demand-expansion activities and are independent of the State department of agriculture. Most State programs devote a portion of their funds to research at the State's landgrant colleges. In 1979, 266 State-legislated promotion and research programs existed. Table 7 shows the growth in number of State programs by region. About three-fourths of the State programs were established in the last two decades. Seven States have not legislated generic advertising programs.

Funding for these programs is primarily through assessments on producers. Maryland, however, used about \$60,000 of State tax revenues to promote its seafood in cities outside the State during 1975-81. Officials with Maryland's Seafood Marketing Authority regarded this Target City Program as highly successful. The program was discontinued during the last 2 years because of funding cuts. Since 1971, as funds allowed, Massachusetts has been matching the spending of commodity groups

Table 6—USDA expenditures and U.S. and foreign cooperator contributions, fiscal year 1982

Commodity	USDA FAS	U.S. cooperators	Foreign cooperators	Total
		1,000 (dollars	
Cotton	3,597	2,548	4,440	10,585
Wheat Oilseeds and	3,570	3,479	4,671	11,720
products	3,349	4,407	7,319	15,075
Feed grains	2,208	1,809	2,621	6,638
Fruits and				
vegetables Poultry and	1,772	3,341	2,205	7,318
eggs	1,004	425	776	2,205
Rice	960	653	2,052	3,665
Red meats	843	603	1,210	2,656
Mohair Food grains other than	27	18	4	49
wheat	21	139	0	160
Catfish	6	15	0	21
Others ¹	1,765	4,270	394	6,429
Total generic promotion	10 122	21 707	25 602	CC E 21
promotion	19,122	21,707	25,692	66,521
Branded products Regional/State	1,142	5,576	1,037	7,755
export groups	377	688	0	1,065
FAS projects	8782	104	0	982
Total	21,519	28,075	26,729	76,323

¹Others include tallow, hides, tobacco, seeds, forest products, and breeding livestock.

that promote "Massachusetts grown" commodities. In fiscal year 1983, Massachusetts divided \$50,000 among a dozen producer groups.

Recent research by Garry Frank of Drake University has provided substantial information about the amount of generic promotion and research under State-legislated programs. Through surveys and interviews with officials in the State departments of agriculture, Dr. Frank found that State-legislated programs spent \$91 million on generic promotion and \$10 million on research in 1979 (table 8). About \$13 million of the promotion funds were spent on foreign market development and maintenance. Fruit was the most heavily promoted commodity, followed by dairy products and field crops like soybeans and wheat. State programs for cotton and wool are

⁹Source: Discussion with Bob Pryor of the Maryland Seafood Marketing Authority on April 28, 1983.

²This includes \$30,000 spent on FAS/ERS research, evaluation, and planning.

Source: Foreign Agricultural Service, USDA.

Table 7—State-legislated programs adopted by region

Region	1930-40	1941-50	1951-60	1961-70	1971-79	Total
			Number	•		
Northwest ¹	3	4	17	20	7	E 1
North-central ²	2	1	1	12	25	51
Great Plains ³	1	2	5	14	23	41
South ⁴	0	7	9	23	23 22	45
Southwest⁵	1	5	6	15	18	61 45
Northeast ⁶	1	2	7	3	10	
Total	8	21	45	87	105	23 266

Idaho, Oregon, and Washington.

²Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin.

³Colorado, Kansas, Missouri, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming.

'Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

⁵Arizona, California, Nevada, New Mexico, and Utah.

Delaware, Maine, Maryland, New Jersey, New York, Pennsylvania, and Vermont.

Source: Garry L. Frank, U.S. Agricultural Policy and the Federal and State Commodity Check-off Programs. Unpublished Ph.D. dissertation, Univ. Neb., Lincoln, 1980, p. 196, revised 1982.

Table 8—Promotion and research expenditures by State-legislated commodity programs, 1979

Commodity	Programs ¹	Promotion ²	Research
	Number	1,000 do	ollars
Fruit Milk and other	48	42,546	1,625
dairy products	20	27,849	715
Field crops ³	50	9,212	4,228
Vegetables	23	4,334	2,205
Livestock	27	3,130	344
Other products	30	2,028	933
Poultry	25	1.914	188
Natural fibers ⁵	7	174	59
Total	230	91,187	10,297

'Includes only State-legislated programs that funded promotion in 1979.

²Includes both domestic and foreign promotional expenditures.
³Includes such commodities as wheat, soybeans, and peanuts.

Includes such commodities as tree nuts, tobacco, and honey.

Includes cotton, wool, and mohair.

Source: Garry L. Frank, U.S. Agricultural Policy and the Federal and State Commodity Check-off Programs. Unpublished Ph.D. dissertation, Univ. Neb., Lincoln, 1980.

small because these products are covered by Federal programs. About half of the State programs allow producers to request refunds. There is some evidence that the amount of money collected under State-legislated programs is growing. For example, South Carolina pork producers and Michigan cherry

growers recently voted to double their assessment rates (10, 21).

Effectiveness of Generic Advertising

Commodity groups and policymakers question whether generic advertising is effective. Does it influence the demand for a product in a predictable fashion? Successful advertising shifts the demand curve outward by attracting new consumers and enticing existing consumers to increase their purchases or pay a higher price. Advertising can also make the demand curve more inelastic (less responsive to price changes) so that if the price of the product rises, less switching to substitute products is likely.

In their review of generic advertising and research, Ward, Thompson, and Armbruster (20) conclude that evaluation of generic advertising's effectiveness is incomplete. They point out that many of the programs are relatively new and the level of expenditures quite low. Furthermore, promotional activities often occur simultaneously with other functions authorized by particular legislation. For example, marketing orders that allow both quality improvement and promotion and education programs, make measuring the effect of each component difficult. Most generic promotion studies have analyzed short-term promotion programs for specific commodities in specific markets.

Over the last 25 years, economists and statisticians have developed increasingly sophisticated methods for determining the influence of advertising on sales. In the late fifties and early sixties, USDA economists used subdivided time series, test and control markets (matched cities), and controlled rotational experiments to determine generic advertising's effectiveness (8). These controlled experiments are very costly to establish and administer, and require cooperation from the commodity group and retailers in the markets under investigation. Some of the early studies also employed regression analyses that allow economists to determine relationships between sales of a commodity and its price, consumer income, population, the price of substitute products, and other factors that affect demand. Using this information, economists can estimate the sales of an advertised commodity without any promotion, and then compare the estimated sales with the actual sales of the advertised commodity. More recent studies use this and other econometric techniques to isolate the influence of advertising on sales and measure its effectiveness.

In addition to the problem of isolating the other variables that affect demand, measuring the effectiveness of advertising is difficult because the total effect of the promotion is not evident in the immediate sales response. Consumers need not respond immediately to advertising programs. Often, sales increase notably only after an extended advertising campaign, and sales do not drop immediately when the promotion ends. In a series of orange juice advertising studies, Ward found that generic advertising had the greatest impact during the quarter the funds were spent, but the effect continued for five more quarters. (9).

Strak and Ness (13) discuss one plausible description of how sales respond to advertising. Sales response does not begin until after an initial threshold level of advertising is reached. After that point, additional advertising increases sales, but at a diminishing marginal rate up to a saturation level of sales. The marginal returns from advertising diminish as the additional advertising reaches people who already know about the product or people who have purchased all they want of it. At the same time, advertising messages that seek to link a certain image with a product may need continuous. heavy bombardment to be successful. Researchers incorporate some form of distributed lag in their advertising effectiveness models to capture the delayed effect of advertising on demand. Strak and

layed effect of advertising on demand. Strak and Ness review several methods for including the carryover effects of advertising in economic analyses. The type of lag form chosen depends on the researcher's assumptions about how quickly advertising loses its effect over time.

The Florida Department of Citrus and the University of Florida have conducted many studies to determine the effectiveness of advertising and the optimal allocation of a generic advertising budget for citrus products. Ward (18, 19) analyzed data from 1966 to 1973 and concluded that advertising is effective in increasing sales of canned, single-strength grapefruit juice, but the effectiveness per dollar spent decreases as total expenditures increase. Ward determined that annual advertising expenditures greater than \$3 million would not have been beneficial for the industry from 1966 to 1973.

Optimal Generic Advertising Budgets

Once commodity groups believe that generic advertising will expand demand, they want to know what level of advertising will be the most profitable. Greater demand gives producers the opportunity to sell more of their commodity at the same price, the same amount at a higher price, or some combination of the two. The magnitude of the quantity and price increase depends on how much demand grows and the supply situation. If stored supplies from previous crop years substantially augment this year's crop, prices do not necessarily have to rise. However, many of the commodities advertised generically are fresh commodities which are perishable or too bulky to store profitably. In the short run, where time is insufficient for present or new producers to raise more crops or livestock, the fixed supply situation may allow farmers to enjoy higher prices.

However, commodity groups rarely can restrict entry of new producers or control output in the long run. If the promotion is successful in expanding demand so that a new, higher price level is established, existing producers may increase output and new producers may be attracted and enter into production. The resulting increase in supply, ceteris paribus, would force prices down from their new levels. This is the case with the Maryland oyster industry where there are no supply controls. Researchers at the University of Maryland concluded that generic advertising for Maryland oysters is most profitable when abundant supplies exist and

prices are low (3). The researchers recommend that advertising be pulsed; high levels of advertising when oysters are plentiful, followed by low levels of advertising to reduce continued high demand and prices, which encourage new producers to enter the industry.

The problem of lack of supply controls was recognized and discussed by Nerlove and Waugh (11). They present a theoretical framework for determining the economically optimal expenditure on advertising in the long run for commodity groups that cannot control output. The longrun optimal advertising budget depends on several demand and supply factors. On the demand side, determining the optimal amount of advertising depends on the longrun effects of advertising on demand and the price elasticity of demand—the responsiveness of quantity purchased to price changes. While the price elasticity of demand for food in the aggregate is highly inelastic because of its role in sustaining life, demand for an individual food is more elastic because of the availability of substitutes. Typically, demand elasticity varies by commodity.

On the supply side, the longrun optimal advertising budget depends on the longrun price elasticity of supply—how much producers will expand their output as prices rise. Also important are economies of scale for both individual producers and the industry. Economies of scale would allow producers to produce at a lower per unit cost, so more could be produced at a lower price than under the original supply curve. However, diseconomies of scale, such as less fertile land being brought into production. could alter this scenario. The introduction of new technologies can also affect producers' costs and profits. The final factor that Nerlove and Waugh include is the rate of return of alternative investments. After all, producers could invest the money deducted for generic advertising in interest-earning money market funds or other investments.

Nerlove and Waugh were among the first to identify a relationship between the factors that maximize aggregate profits of producers, subtracting individual production costs and collective advertising expenditures. They apply this relationship to orange advertising to determine under what conditions such advertising would be profitable. Strak and Ness applied the Nerlove and Waugh maximizing formula to generic advertising of eggs in the United Kingdom. They conclude that the longrun price elasticity of supply is a critical determinant of the optimal generic advertising budget. Generally, the

more easily producers can alter supply, the smaller the recommended generic advertising budget.

Economists have used other methods to evaluate generic advertising. Optimal control theory was used to determine optimal annual and quarterly citrus advertising budgets (7). The results indicate that it would be beneficial to redistribute some advertising funds from winter to summer months.

Producers who contribute funds for promotional activities want a positive return on their expenditures. They want the additional sales revenue generated to be larger than advertising costs, including the administrative costs of the program. Ward, Thompson, and Armbruster (20) summarize some of the available information on returns to producers from generic advertising for citrus products and milk. For example, a 1980 study conducted for the United Dairy Industry Association evaluated the effectiveness of generic fluid milk advertising expenditures in 10 U.S. milk marketing areas and found that dairy farmers received an average current dollar net return of \$2.20 for each dollar spent on advertising. A 1965 study conducted by USDA, with support from the American Dairy Association, showed comparable results, a net return of \$1.68 for each dollar invested in generic milk advertising.

Benefits and Costs to Consumers

The question of how consumers are affected by generic advertising centers around three issues. The first is whether the advertisements provide useful information. Nutritional information about specific commodities, for example, benefits consumers. Similarly, consumers can benefit if the generic advertisments provide recipe ideas. In addition, generic promotion programs may help offset the effects of advertising for nutritionally inferior foods, or introduce consumers to a greater variety of foods.

The second issue is the effect of generic advertising on product price. Advertising expenses are a cost of doing business which may, at least partially, be built into a higher commodity price. This raises questions about the effect of higher food prices, especially on lower income consumers. These research areas have not been empirically addressed by economists.

Consumers may also face higher prices for generically advertised products if producers cannot expand supply to meet increased demand. Supplies of

agricultural commodities are fixed in the short run because time is needed for crops and animals to grow. Therefore, demand expansion through generic advertising may result in higher consumer prices in the short run.

In the long run, the effect of greater sales of a commodity on consumer prices is unclear. Changes in production and marketing technologies make it very difficult to predict longrun outcomes. If producers expand output to meet increased demand, the associated increase in demand for variable farm inputs, such as fertilizer or seed, could make them more costly. Higher input costs would exert upward pressure on commodity prices, but simultaneous adoption of a cost-cutting technology could have an off-setting effect. Also, if the greater output allows producers to take advantage of cost-reducing machinery or enjoy other economies of scale, prices could be lower.

There is a third way that generic advertising can affect consumers. By not distinguishing one producer's commodity from another's, thereby pointing out the commodity's homogeneous nature, generic advertising may weaken brand loyalty and reduce entry barriers for lesser known or new brands. Consumers gain from this increased competition, especially if it results in lower prices.

Unresolved Issues

Although most generic promotion is financed by producers, Federal and State governments provide commodity groups with the authority to conduct referendums, levy assessments, and contract with advertising agencies to develop generic campaigns. Federal and State governments also monitor the activities of commodity groups to ensure that they comply with governing legislation. In the case of overseas promotion and a few State programs, public funds are used to generically promote U.S. farm commodities. Because of Federal and State involvement in generic advertising and promotion, public policy aspects of the programs warrant attention.

One of the longstanding criticisms of generic advertising for food commodities is that if the total demand for food is fixed, persuading people to eat more of one commodity usually means they will eat less of another (2). For example, advertising for potatoes may result in lower pasta consumption. This criticism raises the policy question of whether the Government should assist selective promotion activ-

ities. Questions have also been raised about the effectiveness of advertising versus price levels. In some situations, prices of substitute foods have a greater influence on sales than advertising. Florida Department of Citrus researchers found that the relative prices, not advertising, of U.S. and Brazilian citrus products were the important determinants of export volumes and sales shares in Canada in 1975-78 [14].

If U.S. aggregate consumption of food cannot be significantly expanded, can we increase our food exports to other countries through generic advertising? Both U.S. producers and the public can benefit from international promotion activities because expanded foreign sales enhance our balance of trade. Situations could arise, however, where expanded foreign markets decrease domestic supplies and force prices up slightly for domestic consumers in the short run.

This problem does not arise with generic promotion of commodities with domestic surpluses, like rice. In 1968, the American Rice Council, in conjunction with FAS, launched an advertising and promotion program in France to increase the use of American long-grain rice. Although more American rice was sold following the promotion, the market share of American rice declined because of rapid growth in sales of a leading French firm's rice. Henderson (6) suggests that because much American long-grain rice loses its identity in the French marketing system, advertising allowances offered to French millers or processors who identify American long-grain rice to consumers would have a greater effect on sales than the consumer-targeted advertising.

If increasing demand for a commodity is not desirable or possible, it may be more beneficial for both producers and consumers to use generic funds for research rather than advertising. Many programs include only a small amount of research money relative to advertising and promotion expenditures (tables 3 and 4). Research into new uses for a commodity could open up new markets. Research on more efficient ways to produce or market the commodity, or ways to improve its nutritional value or retard spoilage, could result in lower costs and better products.

Commodity groups and policymakers can use generic advertising to coordinate demand with production to improve producers' incomes and smooth out surpluses and shortages. For example, the fluid milk industry targets June, a time when production is high,

for its heaviest promotion to counter declining milk consumption as the school year ends. Likewise, Maryland has promoted oysters during low-demand periods. This moderating use of generic advertising has public benefits if it helps reduce government income support payments.

Another question of interest to program analysts is how the body that administers the collection and spending of promotion funds makes its decisions. Decisions of the administering boards are more removed from the profits derived from product sales, so they do not face the same market discipline as executives of firms selling branded food products. The board may authorize excessive advertising that is not cost-effective. Resources are also expended on newsletters and presentations to convince producers that their contributions are being put to good use. Commodity groups need objective guidelines for using their promotion funds, rather than relying solely on the advice of their contracted advertising agencies.

Armbruster (1) points out several equity questions involved in the referendums that decide whether to

institute a check-off system for collecting assessments for generic promotion and research. Passage of Federal programs usually requires an affirmative vote of two-thirds of the producers voting or enough of them to represent two-thirds of the output of those voting. Often those voting represent less than one-third of industry participants. For most State programs, a simple majority of those voting is all that is needed for passage. Armbruster also points out the need to look at the equity questions involved in how costs and benefits of generic promotion and research are distributed among large and small producers and marketing firms, and among low- and high-income consumers.

As regional and national generic advertising programs and their accompanying expenditures multiply, the benefits of these advertising programs, as opposed to alternative uses of the funds, need to be examined. Cost-effectiveness and the distribution of costs and benefits are especially important when public funds are used to sponsor or monitor the programs. Agricultural economists also need to acquire a better understanding of the intercommodity effects of widespread generic advertising.

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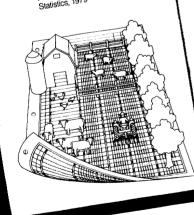
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